abcam

Product datasheet

Anti-HDAC1 + HDAC2 antibody [EPR20327] ab219054

Recombinant RabMAb

1 References 17 Images

Overview

Product name	Anti-HDAC1 + HDAC2 antibody [EPR20327]
Description	Rabbit monoclonal [EPR20327] to HDAC1 + HDAC2
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), ICC/IF, IP, WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: His-tagged human HDAC2 (aa339-488) and HDAC1 (aa1-482) recombinant proteins; HeLa, LNCaP, SH-SY5Y, 293, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; human fetal heart and fetal kidney lysates; mouse and rat brain and spleen lysates; rat kidney lysates. IHC-P: Human testis, tonsil, prostate hyperplasia, prostate cancer, breast cancer and synovial sarcoma tissues; Mouse colon tissue. ICC/IF: HEK-293 and NIH/3T3 cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR20327
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab219054 in the following tested applications.

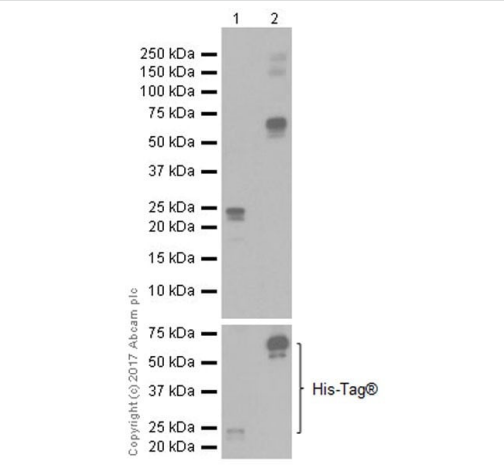
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/700.
ICC/IF		1/1000.
IP		1/30.
WB		1/1000. Detects a band of approximately 55 kDa (predicted molecular weight: 55 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Cellular localization HDAC1: Nucleus. HDAC2: Nucleus.

Images



Western blot - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

All lanes : Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054) at 1/10000 dilution

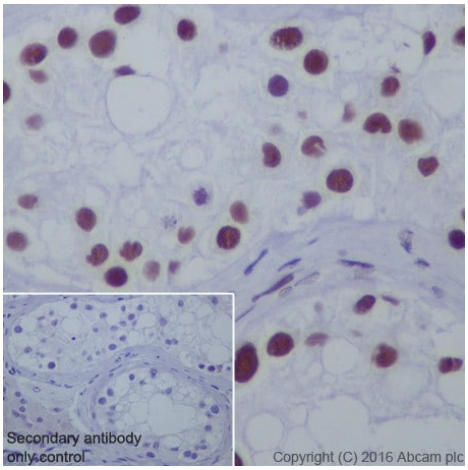
Lane 1 : His-tagged human HDAC2 recombinant protein (aa339-488)
Lane 2 : His-tagged human HDAC1 recombinant protein (aa1-482)

Lysates/proteins at 0.01 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 55 kDa
Observed band size: 22,60 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

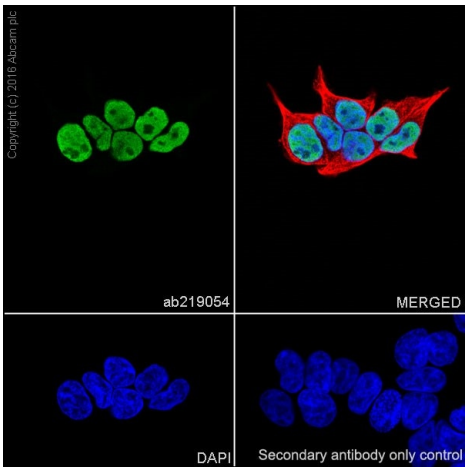
Immunohistochemical analysis of paraffin-embedded human testis tissue labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on human testis is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

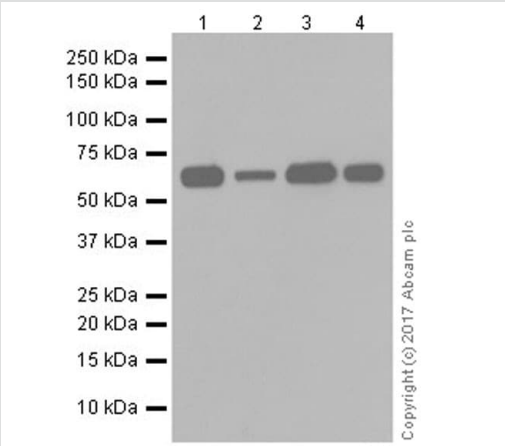
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293 (Human epithelial cell line from embryonic kidney) cells labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on HEK-293 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.



Western blot - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

All lanes : Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054) at 1/2000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 2 : LNCaP (Human prostate cancer cell line) whole cell lysate
Lane 3 : SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate
Lane 4 : 293 (Human epithelial cell line from embryonic kidney) whole cell lysate

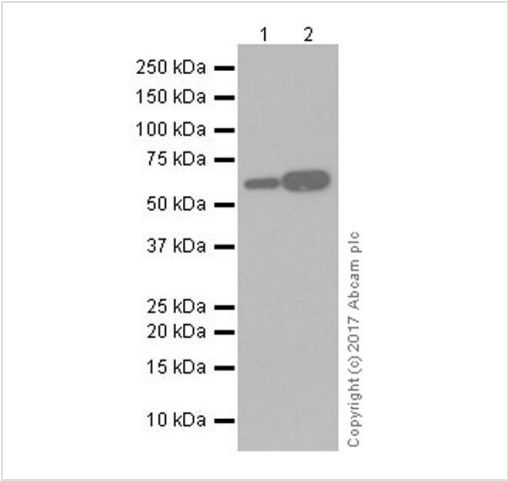
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 55 kDa
Observed band size: 55 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

All lanes : Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054) at 1/1000 dilution

Lane 1 : Human fetal heart lysate

Lane 2 : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

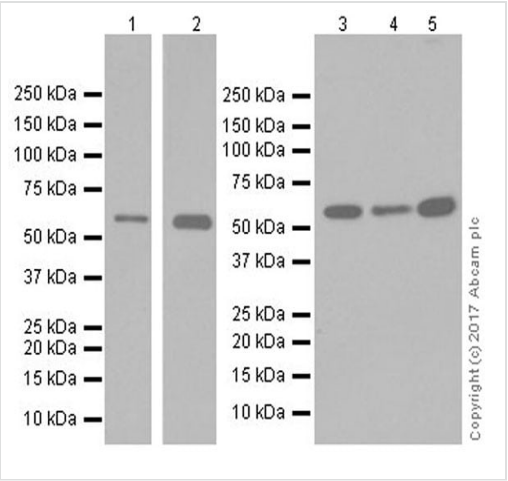
All lanes : VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/4000 dilution

Predicted band size: 55 kDa

Observed band size: 55 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

All lanes : Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054) at 1/1000 dilution

Lane 1 : Mouse brain lysate
Lane 2 : Mouse spleen lysate
Lane 3 : Rat brain lysate
Lane 4 : Rat kidney lysate
Lane 5 : Rat spleen lysate

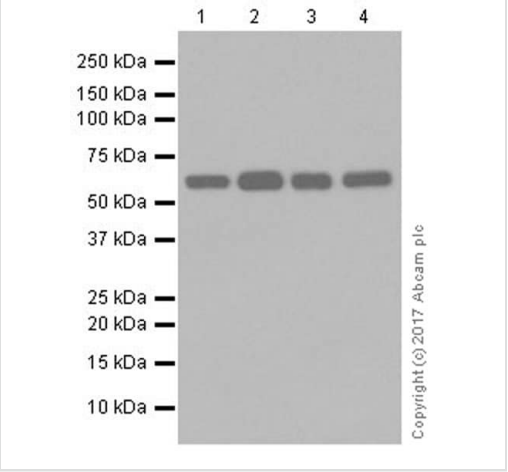
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 55 kDa
Observed band size: 55 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/3-5: 3 minutes; Lane 2: 10 seconds.



Western blot - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

All lanes : Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054) at 1/1000 dilution

Lane 1 : C6 (Rat glial tumor cell line) whole cell lysate
Lane 2 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate
Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate
Lane 4 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

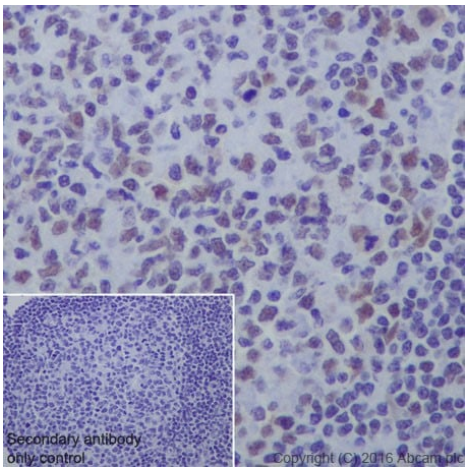
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 55 kDa
Observed band size: 55 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

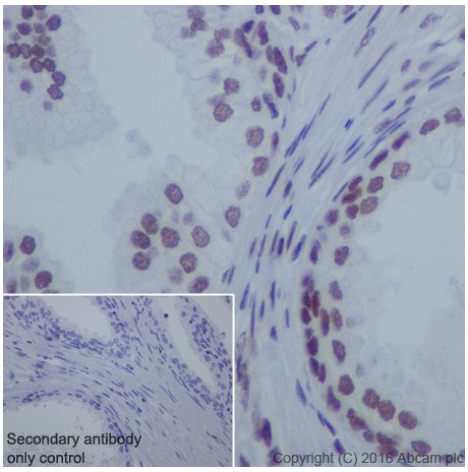
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on lymphocytes of human tonsil is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

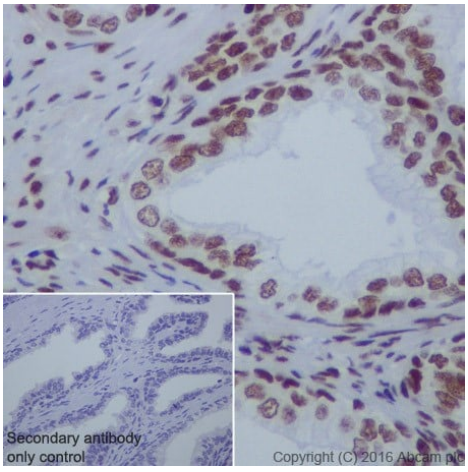
Immunohistochemical analysis of paraffin-embedded human prostate hyperplasia tissue labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on luminal epithelial cells of human prostate hyperplasia, but negative staining on basal cells.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

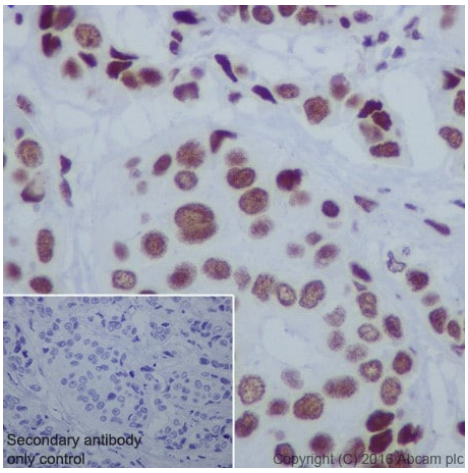
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on tumor cells of prostate cancer; weak or negative staining on basal cells.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

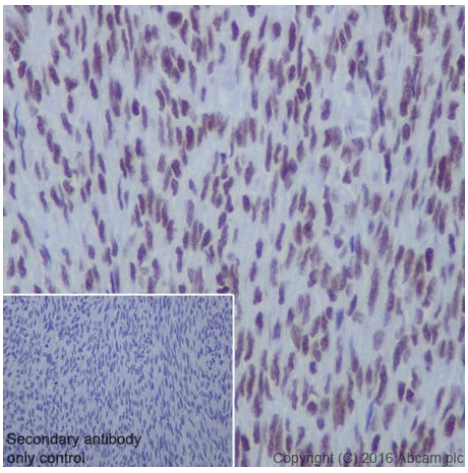
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on tumor cells of human breast cancer is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

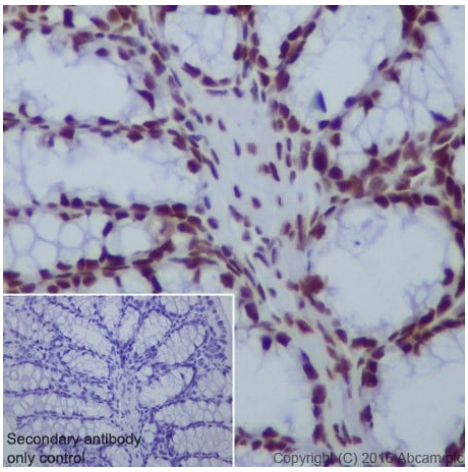
Immunohistochemical analysis of paraffin-embedded human synovial sarcoma tissue labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on human synovial sarcoma is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

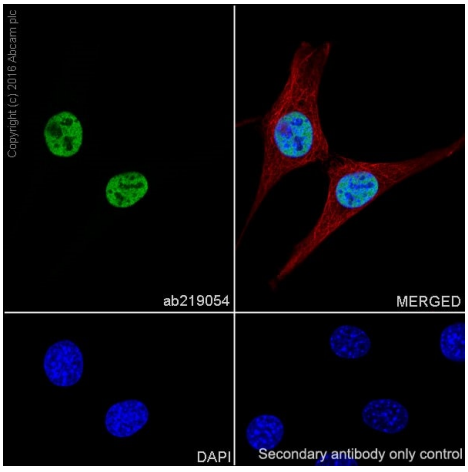
Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on mouse colon is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

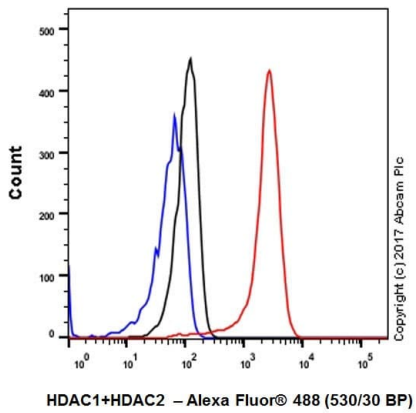
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling HDAC1 + HDAC2 with ab219054 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on NIH/3T3 cell line.

The nuclear counterstain is DAPI (blue).

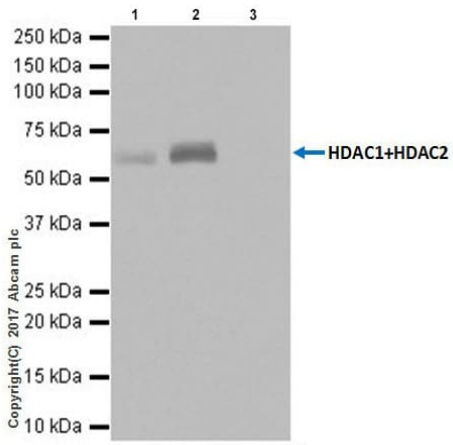
Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cell linefrom cervix adenocarcinoma) cells labeling HDAC1 + HDAC2 with ab219054 at 1/700 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

HDAC1 + HDAC2 was immunoprecipitated from 0.35 mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab219054 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab219054 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input).

Lane 2: ab219054 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab219054 in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

Anti-HDAC1 + HDAC2 antibody [EPR20327] (ab219054)

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